

51027 to 51033—Continued.

51028. *Gossypium* sp. Malvaceæ.

Cotton.

"(No. 398a. June 18, 1920.) Cotton seed from a plant growing in the park at Alajuela, Costa Rica. The variety is one with brown fiber, of unknown origin."

51029 to 51031. *Persea americana* Mill. Lauraceæ.

Avocado.

(P. gratissima Gaertn. f.)

51029. "(No. 400. June 18, 1920.) Bud sticks of avocado No. 45, from the property of Padre Zuñiga, in Alajuela, Costa Rica. This tree was called to my attention by Don Anastasio Alfaro, who has been familiar with it for years. He states that it is one of the best avocados in Alajuela, if not the best of all. I have seen very little of the variety. The parent tree is old, and not in good condition. It stands in an inclosed property behind the principal church of Alajuela. The fruit is slender pyriform in outline, green when ripe, and probably 12 to 16 ounces in weight. The quality is said to be very good, but I suspect the seed may be too large, by our standards. The variety is evidently of the West Indian race, and ripens its crop in July and August."

51030. "(No. 383 and No. 402. May 27 and June 18, 1920.) Bud sticks of avocado No. 43, from the garden of Pantaleon Cordoba, San Jose. This variety has something of a local reputation as an avocado of excellent quality, and in addition ripens later than the average. In some of its characters it looks much like a Guatemalan; but more likely it is simply a highland form of the West Indian race (there is, of course, no hard and fast line which separates the two races, anyway). The parent tree, which stands about 50 feet to the rear of Sr. Cordoba's house, is 25 or 30 feet high, with a scanty crown and a straight trunk nearly 2 feet thick at the base. The fruit at this time (June, 1920) is not half grown, but I have seen a model of the mature fruit, made by Don Anastasio Alfaro, Director of the National Museum. The form is nearly spherical, with a tendency to longitudinal ribbing; the weight is perhaps 18 ounces and the color deep green. I believe the seed is proportionately smaller than in most of the Costa Rican avocados, and the quality of the flesh is said to be excellent. The ripening season is September to November."

51031. "(No. 392a. June 18, 1920.) Seeds of *aguacate de ants*, the wild avocado, from the region of La Palma."

"The character of the tree and fruit is such as to suggest that this species, which is certainly indigenous in the mountains of central Costa Rica, is the wild prototype of the cultivated Guatemalan race, if not of the West Indian as well. The wild tree has been observed up to the present only at altitudes between 4,500 and 5,000 feet. It is not found in the forest, but frequents open places close to small streams and brooks, or is found associated with a few other trees along the margins of such watercourses.

"In general appearance the trees can scarcely be distinguished from Guatemalan avocados; the foliage is of a somewhat lighter shade of green than is common in the latter. The flowering season is March and April, and the fruits ripen a year from the following May or June—that is, in from 12 to 15 months. The